

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented) A magnetic disk apparatus comprising:

a magnetic disk holding data by magnetic information in tracks on a magnetic recording film;

a magnetic head with a slider having a heat element to locally heat said magnetic disk, a write element to apply a magnetic field modulated by an electric signal to an area of said magnetic disk heated by the heat element, and a read element to convert the magnetic information on said magnetic disk into an electric signal, wherein the write element maintains a static position with respect to a body of the slider, and wherein the heat element and the write element are mutually differing components from one another and are distanced from one another on the slider;

an actuator to move said magnetic head along a circular-arc in a radial direction of the magnetic disk; and

a realigning mechanism that moves a position of the area heated by said heat element in a width direction of said slider, to dynamically realign the area heated onto a same track as the write element.

Claim 2 (Canceled)

Claim 3 (Previously Presented) A magnetic disk apparatus comprising:

a magnetic disk holding data by magnetic information in tracks on a magnetic recording film;

a magnetic head with a slider having a heat element to locally heat said magnetic disk, a write element to apply a magnetic field modulated by an electric signal to an area of the magnetic disk heated by the heat element, and a read element to convert the magnetic information on said magnetic disk into an electric signal, wherein the heat element maintains a static position with respect to a body of the slider, and wherein the heat element and the write element are mutually differing components from one another and are distanced from one another on the slider;

an actuator to move said magnetic head along a circular-arc in a radial direction of the magnetic disk; and

a realigning mechanism that moves a position of the write element in a width direction of said slider, to dynamically realign the write head onto a same track as the area heated by the heat element..

Claim 4 (Previously Presented) The magnetic disk apparatus according to claim 1, comprising a servo circuit that controls said realigning mechanism so as to move the area heated by said heat element and said write element through the same track during a write operation.

Claim 5 (Previously Presented) The magnetic disk apparatus according to claim 4, wherein said servo circuit generates an electric output with an offset amount of said realigning mechanism corresponding to a yaw angle of said magnetic head and a temperature in the magnetic disk.

Claim 6 (Canceled)

Claim 7 (Previously Presented) The magnetic disk apparatus according to claim 4, wherein said realigning mechanism has a voice coil motor, and wherein said servo circuit drives said voice coil motor to move the area heated by said heat element or said write element in the width direction of the slider.

Claim 8 (Previously Presented) The magnetic disk apparatus according to claim 4, wherein said realigning mechanism has a capacitance actuator, and wherein said servo circuit drives said capacitance actuator to move the area heated by said heat element or said write element in the width direction of the slider.

Claim 9 (Previously Presented) The magnetic disk apparatus according to claim 4, wherein said realigning mechanism comprises a heat deformation element and an elastic member deformed by the heat deformation element, and wherein said servo circuit drives said heat deformation element to move the area heated by said heat element in the width direction of the slider.

Claim 10 (Previously Presented) The magnetic disk apparatus according to claim 4, comprising a heating light element and a mirror movable by said realigning mechanism, wherein said servo circuit moves the heating light element and the mirror while keeping an approximately parallel positional relation, to move the position of the area on said magnetic disk heated by said heat element in the width direction of the slider.

Claim 11 (Previously Presented) The magnetic disk apparatus according to claim 4, comprising a heating light element, a mirror and an object lens movable by

said realigning mechanism, wherein the servo circuit moves the heating light element, the mirror and the object lens while keeping an approximately parallel positional relation, to move the position of the area on said magnetic disk heated by said heat element in the width direction of the slider.

Claim 12 (Previously Presented) The magnetic disk apparatus according to claim 4, wherein said servo circuit and said realigning mechanism are connected with at least two drive lines.

Claim 13 (Previously Presented) The magnetic disk apparatus according to claim 4, comprising a conversion table containing a plurality of listing pertaining to an output value to said realigning mechanism verses a movement distance of the area heated by said heat element in the width direction of the slider, wherein said servo circuit refers to said conversion table to determine the output value in accordance with a position of said magnetic head in a radial direction of said magnetic disk.

Claim 14 (Previously Presented) The magnetic disk apparatus according to claim 13, wherein said conversion table is generated by adjusting conversion data by performing test writing processing and reading processing, while changing the position of said magnetic head in the radial direction of said magnetic disk, and changing the output value to said realigning mechanism in each radial position.

Claim 15 (Previously Presented) The magnetic disk apparatus according to claim 3, comprising a servo circuit that controls said realigning mechanism so as to

move the area heated by said heat element and said write element through the same track during a write operation.

Claim 16 (Previously Presented) The magnetic disk apparatus according to claim 3, wherein said servo circuit generates an electric output with an offset amount of said realigning mechanism corresponding to a yaw angle of said magnetic head and a temperature in the magnetic disk.

Claim 17 (Previously Presented) The magnetic disk apparatus according to claim 3, wherein said realigning mechanism has a voice coil motor, and wherein said servo circuit drives said voice coil motor to move said write element in the width direction of the slider.

Claim 18 (Previously Presented) The magnetic disk apparatus according to claim 3, wherein said realigning mechanism has a capacitance actuator, and wherein said servo circuit drives said capacitance actuator to move said write element in the width direction of the slider.

Claim 19 (Previously Presented) The magnetic disk apparatus according to claim 3, wherein said realigning mechanism comprises a heat deformation element and an elastic member deformed by the heat deformation element, and wherein said servo circuit drives said heat deformation element to move said write element in the width direction of the slider.

Claim 20 (Previously Presented) The magnetic disk apparatus according to claim 3, wherein said servo circuit and said realigning mechanism are connected with at least two drive lines.

Claim 21 (Previously Presented) The magnetic disk apparatus according to claim 3, comprising a conversion table containing a plurality of listing pertaining to an output value to said realigning mechanism verses a movement distance of the area heated by said heat element in the width direction of the slider, wherein said servo circuit refers to said conversion table to determine the output value in accordance with a position of said magnetic head in a radial direction of said magnetic disk.

Claim 22 (Previously Presented) The magnetic disk apparatus according to claim 21, wherein said conversion table is generated by adjusting conversion data by performing test writing processing and reading processing, while changing the position of said magnetic head in the radial direction of said magnetic disk, and changing the output value to said realigning mechanism in each radial position.

Claim 23 (Previously Presented) A magnetic disk apparatus comprising:
a magnetic disk holding data by magnetic information in tracks on a magnetic recording film;

a magnetic head with a slider having a heat element to locally heat said magnetic disk, a write element to apply a magnetic field modulated by an electric signal to an area of said magnetic disk heated by the heat element, and a read element to convert the magnetic information on said magnetic disk into an electric signal, wherein the write element maintains a static position with respect to a body of

the slider; and, wherein the heat element and the write element are mutually differing components from one another and are distanced from one another on the slider;

an actuator to move said magnetic head along a circular-arc in a radial direction of the magnetic disk; and

a realigning mechanism that moves at least one of a position of the area heated by said heat element and the write element in a width direction of said slider, to dynamically realign the area heated onto a same track as the write element during a write operation.

Claims 24 and 25 (Cancelled)